
Dangerous Depots: The Growing Humanitarian Problem Posed by Aging and Poorly Maintained Munitions Storage Sites Around the World

Fact Sheet

By

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[Some information in the historical timeline in this fact sheet was drawn from a list entitled “Major Ammunition Accidents — 1916 to 2008” compiled by Colonel George Zahaczewsky, U.S. Army (Retired). Colonel Zahaczewsky was formerly the Director of the United States (U.S.) Department of Defense’s Humanitarian Demining Research and Development Program. Information was also drawn from “Recent Explosive Events in Ammunition Storage Areas,” a report of 137 incidents released in June 2007 by the South Eastern and Eastern Europe Clearinghouse for the Control of Small Arms and Light Weapons (www.seesac.org)].

On March 15, 2008, a series of massive and deadly explosions ripped through an Albanian government munitions depot in the village of Gërdec near Tirana, resulting in 24 deaths, injuries to over 300 more people, and catastrophic damage to hundreds of homes and other civilian structures within a 2.5 kilometer (1.5 mile) radius. Contributing factors to the initial explosion, which triggered a cascade of further explosions, involved old, unstable ammunition, improper storage, and unsafe handling. Sadly, this was not a unique incident.

Catastrophic explosions at other munitions storage depots in populated areas in Uzbekistan and Bulgaria have since occurred. They are the latest in a series of incidents spanning many years and among the most recent manifestations of an international problem that has worsened since the end of the Cold War — government arms depots filled with ageing, unstable, poorly maintained, improperly stored, and weakly guarded munitions. These “dangerous depots” have the potential to create even more casualties on an annual basis than landmines and explosive remnants of war.

The Landmine Monitor recorded a total of 5,751 known casualties in 2006 from landmines and explosive remnants of war worldwide. Yet in one afternoon alone in 2007, a catastrophic explosion at a munitions depot outside of Maputo, the capital of Mozambique, killed and injured over 600 people, far more than the 35 people reportedly killed by landmines and explosive remnants of war in Mozambique the previous year.

Years ago the U.S. recognized this growing humanitarian threat to innocent civilians around the world whose homes, schools, markets, and places of worship are in close proximity to munitions depots filled with ageing artillery shells, bombs, and other munitions, even sea mines, and that are prone to spontaneous explosions due to improper storage and unsafe handling. The Office of Weapons Removal and Abatement (www.state.gov/t/pm/wra) in the U.S. Department of State’s Bureau of Political-Military Affairs offers Physical Security and Stockpile Management assistance to other countries to help them deal with their dangerous depots. This office, in concert with the Defense Threat Reduction Agency (www.dtra.mil/oe/osi/programs/smarms/index.cfm?More), has already been invited by several countries around the world to provide such assistance. In fact, the largest arms and munitions destruction project in history is being undertaken in Ukraine through a North Atlantic Treaty Organization (NATO) Partnership for Peace Trust Fund project, in which this Office is serving as the focal point for the U.S., which is the lead donor. Unfortunately, the U.S. has received

fewer requests for help than is commensurate with the problem of dangerous munitions depots around the world.

The historic timeline of selected incidents [that follow indicate] the humanitarian impact posed by dangerous depots is widespread and worsening.

Examples of Major Accidents at Munitions Depots

2008 July 10, Uzbekistan

An explosion at a military depot in Kagan, southeast of Bukhara, killed at least three persons and injured twenty-one, according to the host government. There have been unconfirmed reports of even more casualties.

July 3, Bulgaria

A series of explosions at the Chelopchene munitions depot in Sofia, capital of Bulgaria, rocked the city and forced the evacuation of residents within a 6 kilometer (3.7 mile) radius. Tons of ammunition and explosives blew up immediately. More munitions and explosives are believed to be damaged, constituting a danger. The U.S. immediately offered to help remediate this hazardous explosive site and Bulgaria accepted. The Office of Weapons Removal and Abatement is preparing to render assistance.

March 15, Albania

A massive explosion at a munitions depot in Gërdec, northwest of the capital Tirana, killed some 24 people, injured over 300, destroyed over 400 homes, and resulted in the evacuation of over 4,000 nearby residents. The depot was being used as a munitions demilitarization facility. The precise cause of the explosion is still being investigated. Preliminary findings point to unsafe procedures that triggered a spontaneous explosion which created numerous secondary explosions. The U.S. Embassy, Department of State (DoS), and Department of Defense (DoD) immediately provided assistance. Subsequently, the Office of Weapons Removal and Abatement has committed \$2 million to help Albanian authorities thoroughly and safely clean up all of the highly dangerous unexploded ordnance that still litters the site and environs. See statements related to this tragedy on the U.S. Embassy website is found at: http://tirana.usembassy.gov/2008_releases.html.

2007 - December 29, Colombia

A series of about six explosions at an army base in Medellin killed two people, injured seven, and caused neighboring civilian residents to flee. The first explosion was reportedly caused by a grenade that detonated inside a weapons storage area.

July 26, Syria

An explosion at a munitions depot at a military complex approximately 6 miles north of Aleppo killed fifteen soldiers and wounded fifty. Officials blamed the explosion on a heat wave.

June 17, Democratic Republic of Congo

A Congolese Army munitions depot near Mbandaka in Equateur Province was destroyed in an explosion, which killed three people and injured 52.

April 7, Sudan

The international airport in Khartoum was closed temporarily due to an explosion in an adjacent munitions depot. Fortunately, there were no reported casualties.

March 22, Mozambique

Over 100 people were killed and more than 500 injured when the Malhazine Ammunition Depot exploded in a densely populated neighborhood 10 kilometers (6.2 miles) from the center of downtown Maputo, the capital. Unexploded ordnance from that explosion continued to injure people for several days afterwards. Hot weather and negligence were cited as the cause. The depot was constructed in 1984 by the Soviet Union and stockpiled with obsolete Soviet-era weapons and munitions. It had already experienced an explosion in January 2007, which injured three people.

2006 - October 19, Serbia

An explosion in a munitions depot injured approximately twenty people in the town of Paracin and caused damage, some of it significant, in that town and in the villages of Cuprija and Jagodina. The United Kingdom and United Nations Development Program (UNDP) provided assistance.

March 23, Afghanistan

Two civilians were killed and almost 60 were injured, along with eighteen Afghan Army soldiers, when a fire and explosion occurred in a storage area for confiscated weapons and ammunition in Jabal Saraj, northeast of Kabul. The munitions had been collected as part of the Disarmament of Illegal Armed Groups Program sponsored by the UNDP. Leaking white phosphorus munitions may have caused the accident. The site was eventually cleared by a DynCorp International explosive ordnance disposal team funded by the Office of Weapons Removal and Abatement.

2005 - October 1, Russia

A fire in a Russian Pacific Fleet ammunition storage depot on the Kamchatka Peninsula forced the evacuation of five local towns. Although subsequent explosions in the depot scattered flying ordnance over an 8 kilometer (nearly 5 mile) area, there were no reported casualties.

May 2, Afghanistan

An illicit collection of munitions in Bajgah, north of Kabul, exploded, killing 28 people, injuring 13, and leveling 25 houses in the village. The munitions had been stockpiled by a local militia commander.

2004 - May 6, Ukraine

Five people were killed and over 300 wounded in explosions in ammunition-loaded railroad cars at a munitions storage site near Melitopol (Novo-Bogdanovka) in the Zaporozhye region of Ukraine. The explosions also forced the evacuation of over 5,000 people living within a 15 kilometer (9.3 mile) radius of the disaster site. Over 300 buildings were destroyed; and six villages — Novobohdanovka, Vorozhdeniye, Privolnoye, Spaskoye, Oriovo, and Vysokoye — within 40 kilometers (nearly 25 miles) of the depot were reported to be partially or totally destroyed. Some reports attributed the accident to cigarette smoking within the depot.

February 19, India

Thirty persons were injured due to an explosion at a munitions depot in Amritsar, India.

2003 - October 11, Ukraine

Several thousand people were evacuated from their homes after a series of explosions ripped through a munitions depot at Artemovsk (Artyomovsky) in the eastern Donetsk region. The explosions, caused by a fire, shattered the windows of several apartment blocks.

June 28, Iraq

Approximately 30 Iraqis were killed, and scores injured, when an artillery ammunition dump they were looting north of Haditha blew up.

March 23, Ecuador

An explosion at a navy base in Guayaquil killed one, injured 22, and damaged at least 360 homes. A second explosion occurred on March 30 but reportedly caused no new casualties.

January 23, Peru

An explosion killed seven Peruvian military personnel who were inspecting ammunition at a base depot and injured fifteen other military personnel and 80 civilians on the base, which is located about half a mile from the city of Tumbes.

2002 - November 21, Ecuador

Two explosions in the munitions depot of Ecuador's largest military installation near the city of Riobamba killed seven people and injured 274. The incident was attributed to the accidental detonation of a grenade during a munitions handling operation.

October 30, Mozambique

The explosion of a munitions depot in Beira reportedly killed six people, injured fifty others, and affected approximately 900 more. Three more people who lived in the area were killed in November 2006 after encountering an item of unexploded ordnance that had been projected from this 2002 explosion.

June 28, Afghanistan

Nineteen people (some reports state 32) were killed and as many as 70 injured when a munitions depot blew up in Spin Boldak. The explosion (cause unknown, although there was one report of a rocket attack) scattered rocket-propelled grenades, anti-aircraft rounds, and small arms ammunition over a wide area.

January 29, Thailand

[Damaged munitions from an incident that occurred in 2001 caused] a second, smaller explosion in a munitions depot in Pak Chong and resulted in eleven casualties.

January 27, Nigeria

Catastrophic explosions at the Ikeja ammunition depot in the center of Lagos and the resulting panic, which caused as many as 600 people to drown in a canal as they fled, resulted in more than 1,100 deaths and 5,000 injured. The accident displaced 20,000 people and destroyed much of the northern part of Lagos. A fire near the depot reportedly initiated the explosion. However, other reports blamed the accident on the deteriorated condition of much of the old munitions stored there. The U.S. Department of State's former Office of Humanitarian Demining Programs (a precursor to the Office of Weapons Removal and Abatement) provided clean up assistance through a contract with RONCO Consulting Corporation.

January 11, India

An explosion at a munitions depot in Bikaner killed two persons and injured 12.

The preceding list of incidents is merely a sampling. There have been many more accidents at munitions depots around the world over the years. The phenomenon of catastrophic explosions at munitions depots is not new, nor is it simply a post-Cold War development. For example, on August 18, 1946 the sudden detonation of 28 sea mines, containing approximately 9 tons of explosives, killed 70 personnel and injured 100 others in Vergarolla, Croatia. However, since the end of the Cold War, the frequency of such incidents has increased as has the expansion of civilian dwellings towards what were once isolated depots in some cases. As munitions deteriorate further, new tragedies will follow unless this problem is more widely acknowledged and addressed. The Office of Weapons Removal and Abatement and the Defense Threat Reduction Agency remain committed to helping confront it.